FRIDAY FLYER – SEPTEMBER 7, 2012

Something to share—an interesting research project or kudos for a student, teacher or mentor? Contact Kris Whelan.

CENTER SPOTLIGHT: Kansas State University - http://www.phys.ksu.edu/hep/quarknet.htm

Contact Bharat Ratra for ideas on programs for a rural center with more than one meeting location.

The KSU group held two workshops last year. In November they held a workshop at the Ft. Hays State University Physics Department in Hays, Kansas. They chose this location so that teachers in the remote western part of the state could participate more easily. Eight teachers focused on hands-on activities using the KSU-produced Visual Quantum Mechanics kit, which they received for their classrooms. KSU planned to hold a masterclass in the spring but determined that the teachers needed more training. They asked QuarkNet for help. Shane Wood agreed to lead a masterclass prep workshop for them. Eleven teachers participated in this very successful event held in July.

This year, KSU teachers have been busy participating in many professional development activities sponsored mainly by QuarkNet. Some teachers attended the annual Boot Camp at Fermilab; others presented particle physic talks at the Kansas Association of Teachers of Science annual meeting. Approximately 24 teachers participate in the KSU center, a core group of six or so regularly, and the rest at the rate of once every other meeting. KSU continues to specialize in serving small rural high schools throughout the state. Mentor Tim Bolton is stepping aside for a two-year appointment with the Department of Energy, and Bharat Ratra will take over in Tim's absence with assistance from other members of the KSU HEP group (Glenn Horton-Smith, Andrew Ivanov and Yurii Maravin), and the KSU physics education research group (Sanjay Rebello and Dean Zollman). Plans for 2012–2013 include a fall workshop devoted to particle astrophysics and cosmology and participation in a masterclass in spring 2013.

NEWS FROM QUARKNET CENTRAL
Mentors, deliverables are due this month! Please send Anne Zakas (zakas.1@nd.edu) your: - Summary report of center activities. - Invoices. - Attendance sheets. - Updated contact database. - Student abstracts if you had summer research teams.
Staff has finished a busy summer of site visits and workshop facilitations. We continue to be impressed by the professionalism, creativity and dedication of "our" teachers and mentors. We look forward to learning your plans for next year. Looking for new ideas? Maybe you saw something in a Friday Flyer or ask us about fellows-run workshops and masterclasses.

PHYSICS EXPERIMENT ROUNDUP: AFTER THE HIGGS: THE NEW PARTICLE LANDSCAPE
http://www.nature.com/news/after-the-higgs-the-new-particle-landscape-1.11286

After the Higgs discovery, physicists are deciding how to study new physics beyond the Standard Model. Dark matter, neutrino oscillations and other phenomena will determine the direction of future experiments. What will be the next generation of high-energy physics experiments?

Just for Fun
String theory is explained in a catchy music video. http://www.symmetrymagazine.org/article/august-2012/a-love-of-science-conveyed-through-youtube-0

Staff Teachers

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